

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDBOR0G0R0
Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Hackelia ursina* (A. Gray) I.M. Johnston.
COMMON NAME: Chihuahuan Stickseed
SYNONYMS: *Echinosperrum ursina* A. Gray; *Lappula ursina* (A. Gray) Greene
FAMILY: Boraginaceae

AUTHOR, PLACE OF PUBLICATION: Johnston, Ivan M. 1923. Cont. Gray Herb. n.s. 68: 46.

TYPE LOCALITY: [*Hackelia ursina* var. *diaboli*: Devils Canyon, Pinal County, AZ]

TYPE SPECIMEN: [*Hackelia ursina* var. *diaboli*: ARIZ 90256 G.J. Harrison 1880, Holotype]

TAXONOMIC UNIQUENESS: The genus *Hackelia* contains approximately 40 species (Hickman 1993). Three species of *Hackelia* are recognized by Lehr (1978) as occurring in Arizona. Within the species *Hackelia ursina*, there exists three varieties: *Hackelia ursina* (Greene ex Gray) I.M. Johnston var. *diaboli* J.L. Gentry, 1974, *Hackelia ursina* var. *pustulata* (J.F. Macbr.) J.L. Gentry, 1974, and *Hackelia ursina* var. *ursina*, 1974, with all three occurring in Arizona.

DESCRIPTION: Biennial herb with stems up to one meter; leaves petiolate, entire, ovate; corolla white, sometimes bluish at the center, 5-10 mm in diameter; in naked racemes; pedicels reflexed, style surpassing the nutlets; nutlets attached to a pyramidal gynobase by a submedial areola; the marginal appendages of the nutlets usually much united.

AIDS TO IDENTIFICATION:

ILLUSTRATIONS:

TOTAL RANGE: Presently known distribution is SE Arizona, Animas Mts., NW New Mexico, and Chihuahua, Mexico (Northern). Gentry and Carr cite 28 locations in Arizona for the three varieties.

RANGE WITHIN ARIZONA: Apache County: Springerville; Cochise County: Chiricahua Mountains, Silver Peak; Gila County; Graham County: Pinaleno and Galiuro Mountains; Greenlee County: NE of Clifton; Pima County: Santa Rita and Santa Catalina Mountains; Pinal County: Pinal Mountains.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous/deciduous forb/herb biennial/perennial

PHENOLOGY: Flowers white or at most bluish only about the center, present May-October.

BIOLOGY: Erect stems and flowers produced the second year. Stems up to 1 meter, although usually somewhat less. Per Dave Bertelsen (2000) "I assume the description of this species as a "hemcryptophyte (partially hidden plant)" refers to the first year's growth. I have seen no evidence of first-year growth, such as basal leaf rosettes."

HABITAT: The plant usually grows in shade on moist, north-facing slopes, in the oak and pine belts. Often in canyons, at mid elevations.

ELEVATION: 5,000 to 8,000 feet (1525 - 2440 meters).

EXPOSURE: North-facing slopes

SUBSTRATE: Soil pockets on rocky slopes in Finger Rock Canyon.

PLANT COMMUNITY: Oak-pine woodland/forest. Associates in Finger Rock Canyon include *Quercus arizonica*, *Q. hypoleucoides*, *Q. rugosa*, *Pinus discolor*, *Garrya wrightii*, *Ptelea trifoliata*, *Rubus neomexicanus*, *Halimolobos diffusus*, *Rhamnus crocea*, *Thalictrum fendleri*, and *Scrophularia parviflora*.

POPULATION TRENDS: In Finger Rock Canyon two populations of *Hackelia ursina* have been observed. The first population, located in 1984, bloomed in 1984-86, 1988 and 1990-94. The second population, located in 1990, bloomed in 1990-94 and 1998-99 (Bertelsen 2000).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1999).

MANAGEMENT FACTORS: Logging and grazing in some areas are likely.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: USFS - Apache-Sitgreaves and Coronado National Forests.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

- Bennett, P.S., R.R. Johnson, and M.R. Kunzmann. 1996. An Annotated List of Vascular Plants of the Chiricahua Mountains. USGS Biological Resources Division, Cooperative Park Studies Unit/University of Arizona, Tucson, p. 88.
- Bertelsen, C.D. 2000. Personal communication in review of AGFD, HDMS draft abstract of *Hackelia ursina*.
- Gentry, J.L. 1974. The Southwest Naturalist, 19(2):144.
- Hickmann, J.C. ed. 1993. The Jepson manual, higher plants of California. University of California Press. Berkeley. p. 378.
- Kearney, T.H., and R.H. Peebles with collaborators. 1960. Arizona flora. Second Edition. University of California Press. Berkeley. p.713.
- Lehr, J.H. 1978. A catalogue of the Flora of Arizona. Desert Botanical Gardens, Phoenix, Arizona. p. 129.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

Dave Bertelsen - Tucson, AZ.

ADDITIONAL INFORMATION:

Revised: 1999-11-10 (JCP)
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